



A214.E2026
JACC March 9, 2010
Volume 55, issue 10A



INCIDENCE, RANGE AND CLINICAL IMPACT OF HEMOGLOBIN DECREASE AFTER TRANSRADIAL CORONARY STENTING AND MAXIMAL ANTIPLATELET THERAPY.

i2 Poster Contributions

Georgia World Congress Center, Hall B5

Monday, March 16, 2009, 9:30 a.m.-10:30 a.m.

Session Title: Endovascular and New Technologies

Abstract Category: Vascular Access, Closure Devices and Complications

Presentation Number: 2505-459

Authors: *Olivier F. Bertrand, Josep Rodés-Cabau, Éric Larose, Stéphane Rinfret, Stéphane Rinfret, Jean-Pierre Déry, Onil Gleeton, Can M. Nguyen, Guy Proulx, Louis Roy, Olivier Costerousse, Paul Poirier, Robert De Larochellière, Quebec Heart-Lung Institute, Quebec City, QC, Canada*

Background: Major bleeding is a predictor of death after PCI. Yet, several definitions have been applied with different cut-offs. Although transradial approach dramatically reduces the incidence of major bleeding, the hemoglobin (Hb) changes after transradial PCI are unknown. We have 1) compared Hb values before and after transradial coronary stenting and maximal antiplatelet therapy, 2) assess the impact of post-PCI anemia on outcomes.

Methods: In the EASY trial, 1348 patients with ACS were recruited. All patients received clopidogrel prior to PCI and abciximab. Hb was measured at puncture, 4-6h after PCI and 24h later. MACE (Death, MI and TVR) were assessed up to 3 years after PCI.

Results: According to World Health Organization (WHO) classification, 13% of men (Hb < 13 g/dL) and 23% of women (Hb < 12 g/dL) were anemic prior to PCI ($P < 0.0001$) and 26% of men and 44% of women were anemic 24h post-PCI ($P < 0.0001$). 24h after PCI, there was a Hb decrease of 1.06 ± 0.93 g/dL. Patients with anemia post-PCI had significantly more MACE at 30 days (6% vs 3%, $P=0.0049$), 6 months (12% vs 7%, $P=0.003$), 1 year (16% vs 12%, $P = 0.027$) and at 3 years (24% vs 18%, $P = 0.006$). Differences were due to increased risks of MI and TVR. Anemia at 24 h post-PCI was an independent predictor of MACE at 3 years (HR 1.30, 95% CI : 1.01-1.66, $P=0.045$).

Conclusion: 24 h after transradial PCI with maximal antiplatelet therapy, ~26% of men and 44% of women were anemic. Its negative impact requires preventive measures to limit peri-procedural Hb loss.

